

PRODUCT INFORMATION

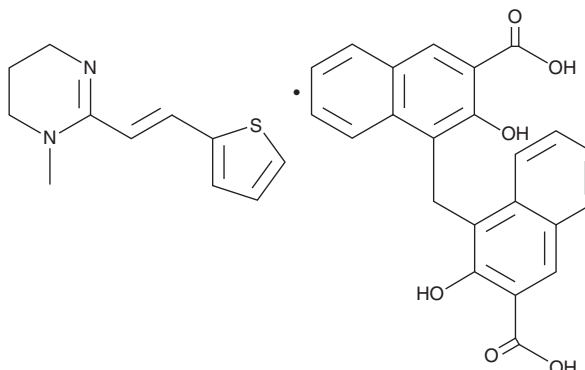


Pyrantel (pamoate)

Item No. 27368

CAS Registry No.: 22204-24-6
Formal Name: 4,4'-methylenebis[3-hydroxy-2-naphthalenecarboxylic acid compd. with 1,4,5,6-tetrahydro-1-methyl-2-[(1E)-2-(2-thienyl)ethenyl]pyrimidine (1:1)

Synonym: CP 10423-16
MF: C₂₃H₁₆O₆ • C₁₁H₁₄N₂S
FW: 594.7
Purity: ≥95%
UV/Vis.: λ_{max}: 238, 290, 302 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Pyrantel is an anthelmintic and agonist of nematode nicotinic acetylcholine receptors (nAChRs).¹⁻³ It activates chimeric *C. elegans* α₇-nAChRs expressed in BOSC cells (EC₅₀ = 40 μM) and induces contraction of *A. suum* muscle (EC₅₀ = 57.5 nM).^{1,2} *In vitro*, pyrantel decreases survival of *A. ceylanicum*, *N. americanus*, and *T. muris* third-stage larvae (IC₅₀s = 90.9, 2, and 95.5 μg/ml, respectively) and *N. americanus* and *T. muris* adults (IC₅₀s = 7.6 and 34.1 μg/ml, respectively).³ *In vivo*, it decreases intestinal *A. ceylanicum* burden in hamsters and intestinal *H. bakeri* burden in mice when administered at a dose of 6 mg/kg.⁴ Formulations containing pyrantel have been used in the treatment of parasitic worm infections.

References

1. Bartos, M., Rayes, D., and Bouzat, C. Molecular determinants of pyrantel selectivity in nicotinic receptors. *Mol. Pharmacol.* **70**(4), 1307-1318 (2006).
2. Martin, R.J., Clark, C.L., Trailovic, S.M., et al. Oxantel is an N-type (methyridine and nicotine) agonist not an L-type (levamisole and pyrantel) agonist: Classification of cholinergic anthelmintics in *Ascaris*. *Int. J. Parasitol.* **4**(9), 1083-1090 (2004).
3. Tritten, L., Silbereisen, A., and Keiser, J. *In vitro* and *in vivo* efficacy of Monepantel (AAD 1566) against laboratory models of human intestinal nematode infections. *PLoS Negl. Trop. Dis.* **5**(12), e1457 (2011).
4. Hu, Y., Ellis, B.L., Yiu, Y.Y., et al. An extensive comparison of the effect of anthelmintic classes on diverse nematodes. *PLoS One* **8**(7), e70702 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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